

HCV heavy chain seq ID 1 comparison with the sequence of
the different CBH antibodies

CDR 1

CDR 2

heavy seq ID 1

CBH 2 heavy

CBH 4B

CBH 4D

CBH 4G

CBH 5

CBH 7

CBH 8C

CBH 8E

CBH 11

CBH 17C

Consensus

CDR 3

heavy seq ID 1

CBH 2 heavy

CBH 4B

CBH 4D

CBH 4G

CBH 5

CBH 7

CBH 8C

CBH 8E

CBH 11

CBH 17C

Consensus

Note: Identical sequence is yellow background and red foreground
 Conservative sequence is light green background and blue foreground

**HCV heavy chain seq ID 2 comparison with the sequence of
the different CBR antibodies**

	CDR 1										CDR 2									
	1 10 20 30 40 50 60 70 80 90										10 20 30 40 50 60 70 80 90 100									
heavy seq ID 2	(1)	1	10	20	30	40	50	60	70	80	(1)	1	10	20	30	40	50	60	70	80
CBH2 heavy	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4B	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4D	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4G	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4H	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4I	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4J	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4K	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4L	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4M	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4N	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4O	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4P	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4Q	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4R	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4S	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4T	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4U	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4V	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4W	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4X	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4Y	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
CBH4Z	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N
Consensus	(1)	EVQL	LD	SG	AE	VK	IG	SS	VK	VS	QV	F	ED	T	S	R	T	I	Q	N

	CDR 3									
	61 70 80 90 100 110 120									
heavy seq ID 2	(61)	61	70	80	90	100	110	120		
CBH2 heavy	(57)	NY	AK	Q	Q	R	L	S	T	A
CBH4B	(57)	NY	AK	Q	Q	R	L	S	T	A
CBH4D	(53)	NY	AK	Q	Q	R	L	S	T	A
CBH4G	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4H	(58)	NY	AK	Q	Q	R	L	S	T	A
CBH4I	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4J	(51)	NY	AK	Q	Q	R	L	S	T	A
CBH4K	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4L	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4M	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4N	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4O	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4P	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4Q	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4R	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4S	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4T	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4U	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4V	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4W	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4X	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4Y	(56)	NY	AK	Q	Q	R	L	S	T	A
CBH4Z	(56)	NY	AK	Q	Q	R	L	S	T	A
Consensus	(61)	NY	AK	Q	Q	R	L	S	T	A

Note: Identical sequence is yellow background and red foreground
Conservative sequence is light green background and blue foreground

**HCV heavy chain seq ID 3 comparison with the sequence of
the different CBH antibodies**

CDR 1

CDR 2

		1	10	20	30	40	50	60	72
heavy seq ID 3	(1)	EVQLLEQSGAEVKKPGSSVKVSCKASGGTFSCHVISWVRQAPGQGLEWMGGSIS-FFGTSNIAQKFGQGRVSI							
CBH 2 heavy	(1)	-EVQLVQSGAEVKK-PGESLKIQCQSG-YNFTIYWIGWVRQMPGKQGLEWVGVINP-GDSEIRSSSSFEQGVIM							
CBH 4B	(1)	---ILVQSGAEVKKPGSSVKVSCRASGGSFGTYGITWVRQAPGQGLEWVGIVPLFD-RPNIAQKFGQGRVAT							
CBH 4D	(1)	--QVQVQSGTEVKKPGSSVKVSCAS---GGPFNYSWVRQAPGQGLEWMGGIIF---DRENYAQKFGQGRVTM							
CBH 4G	(1)	-QVQVQSGAEVKKPGSSVKVSCKASGGTFSNSAS--WVQAPGQGLEWMGGIIP--FATTYTAQRLQGRVTI							
CBH 5	(1)	-QVQLVQSGAEVKKPGSSVKVSCKATGGKFSNFTIS-WVRQVPGQGLEWMGGVVP-VFGGGSYFQKFGRLIT							
CBH 7	(1)	-QVQLVQSGAEVKKPGSSV-ISCKSG-GTFNNYALS WVRQAPGQGLDWMGEITP--FGTENEQKFGQGRVTI							
CBH 8C	(1)	-QVQLQESGPLVK-PSETLSLTCTIVSGG--SISFFNWIRQPGKGLEWIGYMSD-----TGNINSSSLKTR							
CBH 8E	(1)	--QVQVQSGAEVKKPGSSVKVSCKAS--GQNLNITYS-WVRQAPGQGLEWMGGIIP----FTAKSQFQGRVTI							
CBH 11	(1)	-QVQLVQSGAEVKKPGSSVKVSCKAS--GQNLNITYS-WVRQAPGQGLEWMGGIIP----FTAKSQFQGRVTI							
CBH 17C	(1)	---EVQVEGGAVQ--GGSLKVS CAASGFVFSGSAIHWVRQAP-KGLDWVGIRSSSHNYATEEFVSVRGRFTI							
Consensus	(1)	VQLVQSGAEVKKPGSSVKVSCKASGG F I WVRQAPGQGLEWMG I							

CDR 3

		58	70	80	90	100	110	129
heavy seq ID 3	(57)	GTNSAQKFGQGRVSIITADESASTAYMELSSLRSEDTAIYYCAKDPFRFCSGGNCYPGPFQAGQGLTVTVSS						
CBH 2 heavy	(54)	SEIRSSSSFEQGVIMS-ADKSS TAYLGWSSLKASDTAMYYCARQFSGRQWLVPYLSDSW-----						
CBH 4B	(55)	-RPNIAQKFGQGRVAT-DESTSTAYMELESLRFDITAYCAREADIVVGGSSSYFDS-----						
CBH 4D	(50)	DRENYAQKFGQGRVTMT-ADESTNTHYMESGLRSEDTAVYYCARDSDGDFGAVIIGNHYYYGNV-----						
CBH 4G	(53)	ATTYYTAQRLQGRVTIT-ADESTTAYMELSSLRSEDTAIYYCATGQGLELHGSYYIYAMDV-----						
CBH 5	(55)	GGGSYFQKFGRLITA-DDSRSYMISG-----RDDTAYYCAREHGDSSGIYRPLDY-----						
CBH 7	(53)	GTEKYAQKFGQGRVTIT-ADRSNLMDS---SLRSEDSAYCARGYIYGSPFDY-----						
CBH 8C	(51)	---TGNINSSSLKTRV-TDTSKQFSLK-NSVTADTAVYYCARGLIAARLLDYW-----						
CBH 8E	(53)	FTTNYAQKFGQRLTIT-ADSTSTGYMELSSLRSEDTAVYYCARDWLGSRCGGSCSYAFDI-----						
CBH 11	(51)	--FTAKSQFQGRVTI--ADKSTGDM--SSLKSDDTAVYYCARVPGSGTYAYFDY-----						
CBH 17C	(52)	YATEYFVSVRGRFTIS-RDSSRTAYLQ-MNSRTEDTALYCTIPSGLVGQLGHAFF-----						
Consensus	(58)	YAKFGQGRVTIT AD SSTAYM SSLRSEDTAVYYCA						

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HCV heavy chain seq ID 4 comparison with the sequence of
the different CBH antibodies

CDR 1

CDR 2

		1	10	20	30	40	50	60	70
heavy seq ID 4	(1)	EVQLLESQGGGVVQPGRLRLSCAASGFTFKTYGMHWVRQAPGKGLEWVAGISF-DGSNQYHADS VKGRFTV							
CBH 2 heavy	(1)	EVQLVQSGAEKK-PGESLKISCQSG-YNFTTYWIGWVRQMPGKGLEWVGVINP-GDSETRSSSFEQOVIM							
CBH 4B	(1)	--ILVQSGAEVKKPGSSVKVSCRASGGSPGTGTYITWVRQAPGQGLEWVGIVPLFD-RPNYAQKFQDRVAT							
CBH 4D	(1)	-QVQVQSGTEVKKPGSSVKVSCRASGGSPGTGTYITWVRQAPGQGLEWVGIVPLFD-RPNYAQKFQDRVAT							
CBH 4G	(1)	QVQVQSGAEVKKPGSSVKVSCRASGGSPGTGTYITWVRQAPGQGLEWVGIVPLFD-RPNYAQKFQDRVAT							
CBH 5	(1)	QVQVQSGAEVKKPGSSVKVSCRASGGSPGTGTYITWVRQAPGQGLEWVGIVPLFD-RPNYAQKFQDRVAT							
CBH 7	(1)	QVQVQSGAEVKKPGSSV-ISKSG-GTFNNYALSWVRQAPGQGLEWVGIVPLFD-RPNYAQKFQDRVAT							
CBH 8C	(1)	QVQLQESGFLVK-PSETLSLTCTVSGG--SISFFWIRQPGKGLEWIGYMSD-----TGNTNSSLKTR							
CBH 8E	(1)	-QVQVQSGAEVKKPGSSVKVSCRASGGSPGTGTYITWVRQAPGQGLEWVGIVPLFD-RPNYAQKFQDRVAT							
CBH 11	(1)	QVQLVQSGAEVKKPGSSVKVSCRASGGSPGTGTYITWVRQAPGQGLEWVGIVPLFD-RPNYAQKFQDRVAT							
CBH 17C	(1)	--EVQVEGGAVQ--GGSLKVS CAASGFTFKTYGMHWVRQAP-KGLDNVGI RSSHNYATEYFVSVRGRFTI							
Consensus	(1)	VQLVQSGAEVKKPGSSVKVSCRASGG F Y I WVRQAPGQGLEWVG I Y A Q K F Q G R V T I							

CDR 3

		56	70	80	90	100	110	120
heavy seq ID 4	(56)	GSNQYHADS VKGRFTVSRDNRSDTFLQMSRLLEDTA VYTCATEGSPFGS I KGRYYLENWQGITLVTVSS						
CBH 2 heavy	(53)	DSETRYSSSFEQOVIMSADKSSSTAYLGN-SSLKASDTAMTYCARQFSGRQWLVPVLYSDSR-----						
CBH 4B	(54)	D-RPNYAQKFQDRVATADESTSTAYMEL-SSLRFDDTAYCAREADIVVGGSSYFDS-----						
CBH 4D	(50)	-DRENYAQKFQGRVIMTADESTINHYME-SGLRSEDTA VYTCARDSGDFGAVIIGNHYVEMDV-----						
CBH 4G	(52)	FATTYYAQRLOGRVTITADESTAYMEL-SSLQSDDTA IYCKATGQGLELHGSYYYIYANDV-----						
CBH 5	(54)	FGGGSYPQKFQGRITADDSRSTYMLSG-----RDDTAYYCARPHGDSGGIYRFLDY-----						
CBH 7	(52)	FGTEKYAQKFQGRVTITADESNLMDS-----SLRSEDSAYCARGYIYGSFFDY-----						
CBH 8C	(51)	-----TGNTNSSLKTRVTDTSKQFSLK--NSVTAADTA VYTCARGLIAARLLDYW-----						
CBH 8E	(53)	-FTTNYAQKFQGRITITADSTSTGYMEL-SSLRSEDTA VYTCARDWLGSRCGGSCYSAFDI-----						
CBH 11	(51)	---FTAKSQFQGRVIT-ADKSTGDYM---SSLKSDDTA VYTCARVPGSGTYAYFDY-----						
CBH 17C	(51)	NYATEYFVSVRGRFTISRDDSRITAYLQ--MNSRTEDTA LYCIIPSGLVGQLGHAFEF-----						
Consensus	(56)	Y A Q K F Q G R V T I T A D S S Y M S S L R S E D T A V Y Y C A						

Note: Identical sequence is yellow background and red foreground
 Conservative sequence is light green background and blue foreground

**HCV heavy chain seq ID 1 CDR region comparison with the CDR
sequence of the different CBH antibodies**

	(1)	1	8
HCV heavy seq ID 1 CDR 1(1)	---	GHVTT	
CBH 2 heavy CDR 1(1)	---	TYWIG	
CBH 4B heavy CDR 1(1)	---	TYGIT	
CBH 4D heavy CDR 1(1)	----	YS--	
CBH 4G heavy CDR 1(1)	NSAS----		
CBH 5 heavy CDR 1(1)	---	NFIS-	
CBH 7 heavy CDR 1(1)	---	NYALS	
CBH 8C heavy CDR 1(1)	---	SFFW-	
CBH 8E heavy CDR 1(1)	---	SQPIT	
CBH 11 heavy CDR 1(1)	---	IYS--	
CBH 17 heavy CDR 1(1)	---	GSAIH---	
Consensus(1)		Y	

	(1)	1	10	22
HCV heavy seq ID 1 CDR 2	(1)	-	ESIPFGSANYAQNYAQKFRD	
CBH 2 heavy CDR 2	(1)	-	VINPGDSETRYSSSFEG----	
CBH 4B heavy CDR 2	(1)	-	GIVPLFDRPNYAQKFQD----	
CBH 4D heavy CDR 2	(1)	---	GIIFDRENYAQKFQG----	
CBH 4G heavy CDR 2	(1)	--	IIPIFATTYYAQRLOG----	
CBH 5 heavy CDR 2	(1)	-	GVVPVFGGGSYPQKFQG----	
CBH 7 heavy CDR 2	(1)	--	EITPFGTEKYAQKFQG----	
CBH 8C heavy CDR 2	(1)	--	YMSDTGNTNSSLKT-----	
CBH 8E heavy CDR 2	(1)	---	FIPIFTTNYAQKFQG----	
CBH 11 heavy CDR 2	(1)	--	IIPFTAKSQFQG-----	
CBH 17C heavy CDR 2	(1)	IRSSSHNYATEYPVSVRG----		
Consensus (1)		IP	FG	TNYAQKFQG

	(1)	1	10	21
HCV heavy seq ID 1 CDR 3	(1)	-	DPFRYCSAGRCYPGFFQQ--	
CBH 2 heavy CDR 3	(1)	---	GFSGRQWLVPPLYSDSW--	
CBH 4B heavy CDR 3	(1)	----	EADIVVGSSSYFDS---	
CBH 4D heavy CDR 3	(1)	-	DSGDFGAVIIGNHYYYGMDV	
CBH 4G heavy CDR 3	(1)	--	ATGQGTELHGSYYYAMDV	
CBH 5 heavy CDR 3	(1)	PHGDSSGIYRRPLDY-----		
CBH 7 heavy CDR 3	(1)	----	RGYTYGSPFDY-----	
CBH 8C heavy CDR 3	(1)	-----	GLIAARLLDYW-----	
CBH 8E heavy CDR 3	(1)	-	DWLGSCRGGSCYSAFDI---	
CBH 11 heavy CDR 3	(1)	--	VPGS-----	TYAYFDY---
CBH 17C heavy CDR 3	(1)	----	PSGLVGQLGHAFEP---	
Consensus (1)			SGI	YF

HCV heavy chain seq ID 2 CDR region comparison with the CDR
sequence of the different CBH antibodies

	(1)	1	8
HCV heavy seq ID 2 CDR 1 (1)	---	RYTIQ	
CBH 2 heavy CDR 1 (1)	---	TYWIG	
CBH 4B heavy CDR 1 (1)	---	TYGIT	
CBH 4D heavy CDR 1 (1)	---	YS--	
CBH 4G heavy CDR 1 (1)	---	NSAS---	
CBH 5 heavy CDR 1 (1)	---	NFIS-	
CBH 7 heavy CDR 1 (1)	---	NYALS	
CBH 8C heavy CDR 1 (1)	---	SFFW-	
CBH 8E heavy CDR 1 (1)	---	SQPII	
CBH 11 heavy CDR 1 (1)	---	IYS--	
CBH 17 heavy CDR 1 (1)	---	GSATH---	
Consensus (1)		Y	

	(1)	1	18
HCV heavy seq ID 2 CDR 2 (1)	-	NIIPVYNTPNYAQKFQ	
CBH 2 heavy CDR 2 (1)	-	VINPGDSETRYSSSFEG	
CBH 4B heavy CDR 2 (1)	-	GIVPLFDRPNYAQKFQ	
CBH 4D heavy CDR 2 (1)	---	GIIFDRENYAQKFQ	
CBH 4G heavy CDR 2 (1)	--	IIPIFATYYAQRLO	
CBH 5 heavy CDR 2 (1)	-	GVVPVFGGSSYPQKFQ	
CBH 7 heavy CDR 2 (1)	--	EITPFGTEKYAQKFQ	
CBH 8C heavy CDR 2 (1)	--	YMSDTGNTNSSLKT--	
CBH 8E heavy CDR 2 (1)	---	FIPIFTTNYAQKFQ	
CBH 11 heavy CDR 2 (1)	--	IIPFTAKSQFQ----	
CBH 17C heavy CDR 2 (1)	-	IRSSSHNYATEYPVSVRG	
Consensus (1)		IIP F TNYAQKFQ	

	(1)	1	10	21
HCV heavy seq ID 2 CDR 3 (1)	-	VVIPNAIRHTMGYYFDY---		
CBH 2 heavy CDR 3 (1)	---	GFSGRQWLVPYSDSW--		
CBH 4B heavy CDR 3 (1)	----	EADIVVGSSYFDS---		
CBH 4D heavy CDR 3 (1)	-	DSGDFGAVIIGNHYYYGMDV		
CBH 4G heavy CDR 3 (1)	--	ATGQGIELHGSYYYAMDV		
CBH 5 heavy CDR 3 (1)	-	PHGDSSGIYRRPLDY-----		
CBH 7 heavy CDR 3 (1)	----	RGYIYGSPFDY-----		
CBH 8C heavy CDR 3 (1)	-----	GLIAARLLDYW-----		
CBH 8E heavy CDR 3 (1)	-	DWLGSCRGGSCYSAFDI---		
CBH 11 heavy CDR 3 (1)	--	VPGSG-----TYAYFDY---		
CBH 17C heavy CDR 3 (1)	----	PSGLVGQLGHAFEP---		
Consensus (1)		SGI	YFD	

HCV heavy chain seq ID 3 CDR region comparison with the CDR
sequence of the different CBH antibodies

	(1)	1	9
HCV heavy seq ID 3 CDR 1(1)	GHVIS----		
CBH 2 heavy CDR 1(1)	----	TYWIG	
CBH 4B heavy CDR 1(1)	----	TYGIT	
CBH 4D heavy CDR 1(1)	-----	YS--	
CBH 4G heavy CDR 1(1)	-NSAS----		
CBH 5 heavy CDR 1(1)	-NFIS----		
CBH 7 heavy CDR 1(1)	----	NYALS	
CBH 8C heavy CDR 1(1)	----	SFFW-	
CBH 8E heavy CDR 1(1)	----	SQPIT	
CBH 11 heavy CDR 1(1)	----	IYS--	
CBH 17 heavy CDR 1(1)	-GSAIH---		
Consensus(1)		SY	

	(1)	1	18
HCV heavy seq ID 3 CDR 2 (1)	-GSISFFGTNSNAQKFQG		
CBH 2 heavy CDR 2 (1)	-VINPGDSETRYSSSFEG		
CBH 4B heavy CDR 2 (1)	-GIVPLFDRPNYAQKFQD		
CBH 4D heavy CDR 2 (1)	---GIIFDRENYAQKFQG		
CBH 4G heavy CDR 2 (1)	--IIPIFATTYYAQRLOG		
CBH 5 heavy CDR 2 (1)	-GVVPVFGGGSYPQKFQG		
CBH 7 heavy CDR 2 (1)	--EITPFGTEKYAQKFQG		
CBH 8C heavy CDR 2 (1)	--YMSDTGNTNSSLKT--		
CBH 8E heavy CDR 2 (1)	---FIPIFTTINYAQKFQG		
CBH 11 heavy CDR 2 (1)	--IIPFTAKSQFQG----		
CBH 17C heavy CDR 2 (1)	IRSSSHNYATEYPVSVRG		
Consensus (1)	I	FG	TNYAQKFQG

	(1)	1	10	21
HCV heavy seq ID 3 CDR 3 (1)	-DPPRFCSGGNCYPGFFQQ--			
CBH 2 heavy CDR 3 (1)	---GFSGRQWLVPYSDSW--			
CBH 4B heavy CDR 3 (1)	----EADIVVGGSSYFDS---			
CBH 4D heavy CDR 3 (1)	-DSGDFGAVIIGNHYYYGMDV			
CBH 4G heavy CDR 3 (1)	--ATGQGIELHGSYYYYAMDV			
CBH 5 heavy CDR 3 (1)	PHGDSSGIYRRPLDY-----			
CBH 7 heavy CDR 3 (1)	----RGYIYGSPFDY-----			
CBH 8C heavy CDR 3 (1)	----GLIAARLLDYW-----			
CBH 8E heavy CDR 3 (1)	-DWLGSCRGGSCYSAFDI---			
CBH 11 heavy CDR 3 (1)	--VPGSG-----TYAYFDY---			
CBH 17C heavy CDR 3 (1)	----PSGLVGLGHAFEP---			
Consensus (1)		SGI		YF

HCV heavy chain seq ID 4 CDR region comparison with the CDR
sequence of the different CBH antibodies

	(1)	1	8
HCV heavy seq ID 4 CDR 1 (1)	---	TYGMH	
CBH 2 heavy CDR 1 (1)	---	TYWIG	
CBH 4B heavy CDR 1 (1)	---	TYGIT	
CBH 4D heavy CDR 1 (1)	---	YS--	
CBH 4G heavy CDR 1 (1)	---	NSAS----	
CBH 5 heavy CDR 1 (1)	---	NFIS----	
CBH 7 heavy CDR 1 (1)	---	NYALS	
CBH 8C heavy CDR 1 (1)	---	SFFW-	
CBH 8E heavy CDR 1 (1)	---	SQPIIT	
CBH 11 heavy CDR 1 (1)	---	IYS--	
CBH 17 heavy CDR 1 (1)	---	GSATH---	
Consensus (1)		SY	

	(1)	1	18
HCV heavy seq ID 4 CDR 2 (1)	-	GISFDG	SNQYYADSVK
CBH 2 heavy CDR 2 (1)	-	VINPGD	SETRYSSSFEG
CBH 4B heavy CDR 2 (1)	-	GIVPLF	DRENYAQKFQD
CBH 4D heavy CDR 2 (1)	---	GIIFDR	ENYAQKFQ
CBH 4G heavy CDR 2 (1)	---	IIPIFAT	TYAQRLO
CBH 5 heavy CDR 2 (1)	-	GVVPVF	GGGSSYPQKFQ
CBH 7 heavy CDR 2 (1)	-	EITPFG	TEKYAQKFQ
CBH 8C heavy CDR 2 (1)	-	YMSDTG	NTINSSLKT--
CBH 8E heavy CDR 2 (1)	---	FIPIFT	TINYAQKFQ
CBH 11 heavy CDR 2 (1)	---	IIPFTA	KSQFQ----
CBH 17C heavy CDR 2 (1)	-	IRSSSH	NYATEYPVSVRG
Consensus (1)		II	T YAQKFQ

	(1)	1	10	21
HCV heavy seq ID 4 CDR 3 (1)	---	EGSPFG	SIKGRYYLEN--	
CBH 2 heavy CDR 3 (1)	---	GFSGRQ	WLVPYSDSW--	
CBH 4B heavy CDR 3 (1)	---	EADIVV	GGSSYFDS---	
CBH 4D heavy CDR 3 (1)	-	DSGDFG	AVIIGNHYYYGMDV	
CBH 4G heavy CDR 3 (1)	---	ATGQGI	ELHGSYYYAMDV	
CBH 5 heavy CDR 3 (1)	-	PHGDSS	GIYRRPLDY-----	
CBH 7 heavy CDR 3 (1)	---	RGYIYG	SPFDY-----	
CBH 8C heavy CDR 3 (1)	---	GLIAAR	LLDYW-----	
CBH 8E heavy CDR 3 (1)	-	DWLGSC	RGGS CYSAFDI---	
CBH 11 heavy CDR 3 (1)	---	VPGSG---	TYAYFDY---	
CBH 17C heavy CDR 3 (1)	---	PSGLVG	QLGHAFEP---	
Consensus (1)		SGI	YF	

**Comparison of deduced amino acid sequences
of CBHs light chain genes with ID 5**

		CDR 1					CDR 2
		1	10	20	30	40	59
light chain seq ID 5	(1)	-AELTQSPGTL SLS PGERATL SCRASQSVSSN--YLA WYQQRPGQAPRL IITYGASSRAT					
CBH 2 light	(1)	EIVLTQSPGTL-LSPGERATL SCRASQSVLC---YLA WYKQKPGQAPRL IITYGVSRAT					
CBH 4 B light	(1)	--ESVTQSGT LSLSPGERATL SCRASQSVSST--YVA WYQKPGQAPR-ILYDASIRAT					
CBH 4 D light	(1)	-QSALTQPASVSGSPGQSITISCTGTSSDIGGYNFVSWYQY PDKAPV--VIYEVS KRPS					
CBH 4 G light	(1)	DIQMTQSPSSL SASVGD RVTTICRASQGIDN---FLA WYQKPGKVPKLLITYAASSLQS					
CBH 5 light	(1)	DIQMTQSPSTLSASG-DRVAITCRASQSSWL----AWYQKPGAPL--ITYKASNVQD					
CBH 7 light	(1)	DVLMTQSPSSL SASVGD RVTTISCRSQSISSF----LNNWYQKPGKAP-LEISAASSLQS					
CBH 8 C light	(1)	EIVLTQSPATLSLSPGERATL SCRASQSISSR--YLA WYQKPGQAPRL IITYPDTSNRAT					
CBH 8 E light	(1)	DIQMTQSPSSLSSVG--DVTTICRASQITNR--YLNWYQKPGKAPKLLITYAASSLQS					
CBH 11 light	(1)	DIQMTQSPSTL-SSVGD RVTTICRASQSIINL---WLA WYQQP--KAPELIITYKTSTSES					
CBH 17 light	(1)	--SYVLTQTFVSVAPGKTARITCREFNIGTNS---VHW FQQRPGQAPVSIYYDDR--PS					
Consensus	(1)	AELTQSPGTL SLS PGERATL SCRASQSVSSN YLA WYQQRPGQAPRL IITYGASSRAT					

		CDR 3						
		(60)	60	70	80	90	100	112
light chain seq ID 5	(57)	GIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQLYG--NSRWTFGQGTKVEIK						
CBH 2 light	(55)	GIPDRFSGSGSGTDFTLTISRLEPEDEA-YYCQQYG--TSPFTFG-----						
CBH 4 B light	(55)	GV PDRFSGSGSGTDFTLTISRLEPEDFAVYYCQQYG--GSPFFFG-----						
CBH 4 D light	(57)	GVSNRFSAS-SGNTASLTISGLQAEADY YCSSYTNITFVIFGG-----						
CBH 4 G light	(57)	GVPSRFSGSGSGTDFTLTISSLOPEDVATYYCQKYN--SAPFTFGP-----						
CBH 5 light	(52)	GV---SRPSGSGTFTLTIS-LQPD DFATYYCQYIN--NFSGTFGQ-----						
CBH 7 light	(55)	GV-SRPSGSGSGTSTFTLTISLOPEDFATYYCQOSY--SPLITFG-----						
CBH 8 C light	(57)	GIPARFSGSGSGTDFTLTISNLEPEDFAVYYCQQRSNWPPALITFG-----						
CBH 8 E light	(55)	GV-SRPSGSGSGTDFTLTISSLOP-DFATYYCQQSFTSAMYITFG-----						
CBH 11 light	(54)	GVPSRPSGS-GSTFTLTISLOP-DFATYYCQHYS--SSSWITFG-----						
CBH 17 light	(53)	GIPERFGSA-SGDTATLTISRVEVGDEADYSCQVWNNINNHRSSEL-----						
Consensus	(60)	GIPDRFSGSGSGTDFTLTISRLEPEDFAVYYCQLYG NSRWTFGQGTKVEIK						

Note:

Identical sequence: yellow background and red foreground.

Conservative sequence: light green background and blue foreground

Comparison of deduced amino acid sequences of CBHs Light chain genes with ID 6

		CDR 1					CDR 2
		1	10	20	30	40	59
light chain seq ID 6	(1)	AELTQSPATLSLSPGERATLSCRASQ---SVNKYLAWYQOKPGQAPRLIITYDASNRAT					
CBH 2 light	(1)	EIVLTQSPGTL-LSPGERATLSCRASQ---RVLGYLAWYQOKPGQAPRLIITYGVS-RAT					
CBH 4 B light	(1)	--ESVTQSGTSLSPGERATLSCRASQS--VSSTYVAWYQOKPGQAPR-ITYDASIRAT					
CBH 4 D light	(1)	QSALTQPASVSGSPGQSTITISCTGTSSDIGGYNFVSWYQYFDKAPV--VIYEVSKRPS					
CBH 4 G light	(1)	DIQMTQSPSSLSASVGDRVTITCRASQ---GIDNFLAWYQOKPGKVPKLIITYAASSLOS					
CBH 5 light	(1)	DIQMTQSPSTLSASG-DRVAITCRA----SQSSWLAWYQOKPGAPL--LIYKASNVQD					
CBH 7 light	(1)	DVLMTQSPSSLSASVGDRVTISCRS-Q---SISSEFLNWKYQOKPGKAP-LIISAASSLOS					
CBH 8 C light	(1)	EIVLTQSPATLSLSPGERATLSCRASQ---SISRYLAWYQOKPGQAPRLIITYDTSNRAT					
CBH 8 E light	(1)	DIQMTQSPSSLSVG--DVTITCRASQ---TINRYLNWKYQOKPGKAPKLIITYAASSLOS					
CBH 11 light	(1)	DIQMTQSPSTL--SSVGDRVTITCRASQ---SINLWLAWYQOP--KAPELLIYKTSTSES					
CBH 17 light	(1)	--SYVLQTTPVSVAPGKTARITCREPN--IGTNSVHWQQRPGQAPVSIYYDDR--PS					
Consensus	(1)	AELTQSPATLSLSPGERATLSCRASQ SVNKYLAWYQOKPGQAPRLIITYDASNRAT					

		CDR 3				
		60	70	80	90	112
light chain seq ID 6	(56)	GIPARFSGSGSGTDFTLTISNLEPEDFAVYYCQQR---SDWVTFGGGKVEIK				
CBH 2 light	(55)	GIPDRFSGSGSGTDFTLTISRLEPEDFA-YCQQYG---TSPFTFG-----				
CBH 4 B light	(55)	GVPDFSGSGSGTDFTLTISRLEPEDFAVYYCQQYG---GSPFFFG-----				
CBH 4 D light	(57)	GVSNRFSAS-SGNTASLTISGLQAEADYYCSSYTNNTIPVIFFG-----				
CBH 4 G light	(57)	GVPSRFSGSGSGTDFTLTISSLQPEDVATYYCQKYN--SAPFTFGP-----				
CBH 5 light	(52)	GV---SRPSGSGTGFTLTIS-LQPDDEFATYYCQYIN--NFSGTFGQ-----				
CBH 7 light	(55)	GV-SRPSGSGSGTSTFTLTISSLQPEDFATYYCQOSY--SPILLTFG-----				
CBH 8 C light	(57)	GIPARFSGSGSGTDFTLTISNLEPEDFAVYYCQQRSNWPPALTFG-----				
CBH 8 E light	(55)	GV-SRPSGSGSGTDFTLTISSLQPDFAVYYCQOSFSTSAMVTFG-----				
CBH 11 light	(54)	GVPSRPSGS-GSTFTLTISSLQPDFAVYYCQHYS--SSSWTFGQ-----				
CBH 17 light	(53)	GIPERFGSA-SCDTATLTISRVEVGDEADYSCQVWNNINNHRSSEL-----				
Consensus	(60)	GIPARFSGSGSGTDFTLTISNLEPEDFAVYYCQQR SDWVTFGGGKVEIK				

Note:

Identical sequence: yellow background and red foreground.

Conservative sequence: light green background and blue foreground

**Comparison of deduced amino acid sequences
of CBHs Light chain genes with ID 7**

		CDR 1					CDR 2	
		1	10	20	30	40	58	
light chain seq ID 7	(1)	-AELTQSPGTL	SLSPGERATL	SCGASQSVRSNY	-LAWYQOKPGQ	APRLITYGVSSRAT		
CBH 2 light	(1)	EIVLTQSPGTL	LSFGERATL	SCRASQSVLG	--YLAWYQOKPGQ	APRLITYGVSSRAT		
CBH 4 B light	(1)	--ESVTQSGTL	SLSPGERATL	SCRASQSVSTY	-VAWYQOKPGQ	APRLITYGVSSRAT		
CBH 4 D light	(1)	-QSALTQSPASV	SGSPGQSTTISCTGT	SSDIGYNFVSWYQY	PDKAP-VWYIEVSKRPS			
CBH 4 G light	(1)	DIQMTQSPSSL	SASVGDRTITCRASQ	GIDN-F-LAWYQOKPGK	VPKLLTYAASSLOS			
CBH 5 light	(1)	DIQMTQSPSTL	SASG-DRVAITCRASQ	SSWL---AWYQOKPGAPL	-LITYKASNVQD			
CBH 7 light	(1)	DVIMTQSPSSL	SASVGDRTITCRSQ	SISF---LNWYQOKPGK	APRLITYFDTSNRAT			
CBH 8 C light	(1)	EIVLTQSPATL	SLSPGERATL	SCRASQISIR-Y-LAWYQOKPGK	APKLLTYAASSLOS			
CBH 8 E light	(1)	DIQMTQSPSSL	SSVG-DRVTITCRASQ	SINL--WLAWYQOKP	--KAPPELLYKTSTSES			
CBH 11 light	(1)	DIQMTQSPSTL	SSVGDRTITCRASQ	SINL--SVHWFOQRPGQ	APVSLTYDDR--PS			
CBH 17 light	(1)	--SYVLTQTFV	SVAPGKTARITCREPN	IGTN--SVHWFOQRPGQ	APVSLTYDDR--PS			
Consensus	(1)	AELTQSPGTL	SLSPGERATL	SCGASQSVRSNY	LAWYQOKPGQ	APRLITYGVSSRAT		

		CDR 3					109	
		(59)	59	70	80	90	109	
light chain seq ID 7	(57)	GIPDRFSGSGSG	TDFTLTISRLEPED	FAVYYCQY	GSSPRTFG	QGTKEIK		
CBH 2 light	(55)	GIPDRFSGSGSG	TDFTLTISRLEPED	FAVYYCQY	GTSPTFG	-----		
CBH 4 B light	(55)	GVPDRFSGSGSG	TDFTLTISRLEPED	FAVYYCQY	GSSPFFGG	-----		
CBH 4 D light	(57)	GVSNR-FSASSG	NTASLTISGLQAE	DEADYICSSYTNN	ITPVIFGG	-----		
CBH 4 G light	(57)	GVPDRFSGSGSG	TDFTLTISLQPED	VATYYCQY	NSAPTFGP	-----		
CBH 5 light	(52)	GV--S-RPSGGS	GTFTLTISLQPED	FATYYCQY	NNFSGTFGQ	-----		
CBH 7 light	(55)	GV-SRPSGSGS	GTFTLTISLQPED	FATYYCQY	RSNWPPALIFGG	-----		
CBH 8 C light	(57)	GIPARFSGSGSG	TDFTLTISNLEPED	FAVYYCQY	RSNWPPALIFGG	-----		
CBH 8 E light	(55)	GV-SRPSGSGS	GTFTLTISLQPED	FATYYCQY	SFSTSAMVIFGQ	-----		
CBH 11 light	(54)	GVPDRFSGSGS	GTFTLTISLQPED	FATYYCQY	SSSWTFGQ	-----		
CBH 17 light	(53)	GIPER-FGSASG	DTATLTISRVEVG	DEADYSCQVWNT	TNNHSGSEL	-----		
Consensus	(59)	GIPDRFSGSGSG	TDFTLTISRLEPED	FAVYYCQY	GSSPRTFG	QGTKEIK		

Note:

Identical sequence: yellow background and red foreground.

Conservative sequence: light green background and blue foreground

**Comparison of deduced amino acid sequences
of CBHs Light chain genes with ID 8**

		CDR 1					CDR 2	
	(1)	10	20	30	40		59	
light chain seq ID 8	(1)	-AELTQSPATLSVSPGERASLSCRASQ---SVGNLAWYQOKPGQAPRLITYGGNTRAT						
CBH 2 light	(1)	EIVLTQSPGTL-LSPGERATLSCRASQ---RVLGYLAWYQOKPGQAPRLITYGVS-RAT						
CBH 4 B light	(1)	--ESVTQSGTSLSPGERATLSCRASQ--VSSTYVAWYQOKPGQAPR-ILYDASIRAT						
CBH 4 D light	(1)	-QSALTQPASVSGSPGQSITISCTGTSSDIGGYNFVSWYQYFDKAEV--VIYEVSKRPS						
CBH 4 G light	(1)	DIQMTQSPSSLASVGDRTITCRASQ---GIDNFLAWYQOKPGKVPKLLITYAASSLQS						
CBH 5 light	(1)	DIQMTQSPSTLSASG-DRVAITCRA----SQSSWLAWYQOKPGAPL--LIYKASNVQD						
CBH 7 light	(1)	DVLMTQSPSSLASVGDRTITCRS-Q---SISSEFLNWWYQOKPGKAP-LIISAASSLQS						
CBH 8 C light	(1)	EIVLTQSPATLSLSPGERATLSCRASQ---SISRYLAWYQOKPGQAPRLIIPDTSNRAT						
CBH 8 E light	(1)	DIQMTQSPSSLSSVG--DVTITCRASQ---SINLWLAWYQOP--KAPELLITYKTSTSES						
CBH 11 light	(1)	DIQMTQSPSTL-SSVGDRTITCRASQ---SINLWLAWYQOP--KAPELLITYKTSTSES						
CBH 17 light	(1)	--SYVLTQIPVSVAPGKTARITCREPN---IGTNSVHWFOORPGQAPVSIYYDDR--PS						
Consensus	(1)	AELTQSPATLSVSPGERASLSCRASQ SVGNLAWYQOKPGQAPRLITYGGNTRAT						

		CDR 3					
	(60)	60	70	80	90	100	110
light chain seq ID 8	(56)	GTPDRFSGSGSGTEFTLTISSLQSEDFAVYFCQHYSTWPLTFEGGKVEFK					
CBH 2 light	(55)	GIPDRFSGSGSGTDFTLTISRLEPEDFA-YYCQYGTSPFTFG-----					
CBH 4 B light	(55)	GVPRFSGSGSGTDFTLTISRLEPEDFAVYYCQYGGSPFTFG-----					
CBH 4 D light	(57)	GVSNR-FSASSGNTASLTISGLQAEDEADYYCSSYTNNTIPVTEFG-----					
CBH 4 G light	(57)	GVPSRFSGSGSGTDFTLTISSLQPEDVATYYCQKYNAPFTFG-----					
CBH 5 light	(52)	GV--S-RPSGSGSGTFTLTIS-LQPDDEFATYYCQYNNFSGTFEG-----					
CBH 7 light	(55)	GV-SRPSGSGSGTSFTLTISSLQPEDFATYYCQYSYSPLLTFEG-----					
CBH 8 C light	(57)	GIPARFSGSGSGTDFTLTISNLEPEDFAVYYCQQRSNWPPALTFEG-----					
CBH 8 E light	(55)	GV-SRPSGSGSGTDFTLTISSLQPD-DFATYYCQQSFSTSMYTFEG-----					
CBH 11 light	(54)	GVPSRPSGSGS-TEFTLTISSLQPD-DFATYYCQHYSSSSWTFEG-----					
CBH 17 light	(53)	GIPER-FGSAGDTATLTISRVEVGDEADYSCQVWNNNTNNHRSSEL----					
Consensus	(60)	GTPDRFSGSGSGTEFTLTISSLQSEDFAVYFCQHYSTWPLTFEGGKVEFK					

Note:

Identical sequence: yellow background and red foreground.

Conservative sequence: light green background and blue foreground.

Comparison of deduced amino acid sequences of CBHs light chain genes with ID 5

CDR 1

	(1)	14
light chain seq ID 5 CDR 1	(1)	-RASQSVSSNYLA-
CBH 2 light CDR 1	(1)	-RASQRVLGYLE--
CBH 4B light CDR 1	(1)	-RASQSVSSTYVA-
CBH 4D light CDR 1	(1)	TGTSSDIGGYNFVS
CBH 4G light CDR 1	(1)	-RASQGIDNFLA--
CBH 5 light CDR 1	(1)	-RASQSSWLA----
CBH 7 light CDR 1	(1)	--RSQSISSEFLN--
CBH 8C light CDR 1	(1)	-RASQSISRYLA--
CBH 8E light CDR 1	(1)	-RASQTINRYLN--
CBH 11 light CDR 1	(1)	-RASQSINLWLA--
CBH 17 light CDR 1	(1)	--REPNIQTNSVH-
Consensus	(1)	RASQSVSSNYLA

CDR 2

	(1)	9
light chain seq ID 5 CDR 2	(1)	-YGASSRAT
CBH 2 light CDR 2	(1)	---GVSRAT
CBH 4B light CDR 2	(1)	--DASIRAT
CBH 4D light CDR 2	(1)	--EVSKRPS
CBH 4G light CDR 2	(1)	--AASSLQS
CBH 5 light CDR 1	(1)	RASQSSWLA
CBH 7 light CDR 2	(1)	--AASSLQS
CBH 8C light CDR 2	(1)	--DTSNRAT
CBH 8E light CDR 2	(1)	--AASSLQS
CBH 11 light CDR 2	(1)	--KTSTSES
CBH 17 light CDR 2	(1)	---YDDRPS
Consensus	(1)	YGASSRAT

CDR 3

	(1)	17
light chain seq ID 5 CDR 3	(1)	--QLYGNSRWT-----
CBH 2 light CDR 3	(1)	--QQYGTSPFTFG----
CBH 4B light CDR 3	(1)	--QQYGGSPFFGG----
CBH 4D light CDR 3	(1)	SSYTNITPVIFGG----
CBH 4G light CDR 3	(1)	--QKYNAPFTFGP----
CBH 5 light CDR 3	(1)	--QYYNFGSTFGQ----
CBH 7 light CDR 3	(1)	--QQSYSPLLTFGG----
CBH 8C light CDR 3	(1)	QQRSNWPPALITFGG----
CBH 8E light CDR 3	(1)	QQSFSTSAMITFGQ----
CBH 11 light CDR 3	(1)	--QHYSSSSWITFGQ----
CBH 17 light CDR 3	(1)	--QVWNNTNNHRGSSEL
Consensus	(1)	QLYGNSRWT

**Comparison of deduced amino acid sequences
of CBHs Light chain genes with ID 6**

CDR 1

	(1)	<u>1</u>	<u>14</u>
light chain seq ID 6 CDR 1	(1)	-RASQSVNKYLA--	
CBH 2 light CDR 1	(1)	-RASQRVLGYLE--	
CBH 4B light CDR 1	(1)	-RASQSVSSTYVA-	
CBH 4D light CDR 1	(1)	TGTSSDIGGYNFVS	
CBH 4G light CDR 1	(1)	-RASQGIDNFLA--	
CBH 5 light CDR 1	(1)	---RASQSSWLA--	
CBH 7 light CDR 1	(1)	--RSQSISSEFLN--	
CBH 8C light CDR 1	(1)	-RASQSISRYLE--	
CBH 8E light CDR 1	(1)	-RASQTINRYLN--	
CBH 11 light CDR 1	(1)	-RASQSINLWLA--	
CBH 17 light CDR 1	(1)	--REPNIQTNSVH-	
Consensus (1)		RASQSVNKYLA	

CDR 2

	(1)	<u>1</u>	<u>7</u>
light chain seq ID 6 CDR 2	(1)	DASNRAT	
CBH 2 light CDR 2	(1)	-GVSRAT	
CBH 4B light CDR 2	(1)	DASIRAT	
CBH 4D light CDR 2	(1)	EVSKRPS	
CBH 4G light CDR 2	(1)	AASSLQS	
CBH 5 light CDR 2	(1)	KASNVOD	
CBH 7 light CDR 2	(1)	AASSLQS	
CBH 8C light CDR 2	(1)	DTSNRAT	
CBH 8E light CDR 2	(1)	AASSLQS	
CBH 11 light CDR 2	(1)	KTSTSES	
CBH 17 light CDR 2	(1)	-YDDRPS	
Consensus(1)		DASNRAT	

CDR 3

	(1)	<u>1</u>	<u>17</u>
light chain seq ID 6 CDR 3	(1)	QQRSDWVT-----	
CBH 2 light CDR 3	(1)	--QQYGTSPFTFG----	
CBH 4B light CDR 3	(1)	----QQYGGSPFFGG----	
CBH 4D light CDR 3	(1)	SSYINNITPVIFGG----	
CBH 4G light CDR 3	(1)	--QKYNAPFTFGP----	
CBH 5 light CDR 3	(1)	--QYYNNFSGTFCQ----	
CBH 7 light CDR 3	(1)	--QSYSPLLTFGG----	
CBH 8C light CDR 3	(1)	QQRSNWPPALTFCG----	
CBH 8E light CDR 3	(1)	QQSFTSAMYTFGQ----	
CBH 11 light CDR 3	(1)	--QHYSSSSWTFGQ----	
CBH 17 light CDR 3	(1)	--QVWNNTNHRSSEL	
Consensus (1)		QQRSDWVT	

Comparison of deduced amino acid sequences of CBHs Light chain genes with ID 7

CDR 1

	(1)	<u>1</u> 14
light chain seq ID 7 CDR 1	(1)	GASQSVRSNYLA--
CBH 2 light CDR 1	(1)	-RASQRVLGYLE--
CBH 4B light CDR 1	(1)	RASQSVSSTYVA--
CBH 4D light CDR 1	(1)	TGTSSDIGGYNFVS
CBH 4G light CDR 1	(1)	-RASQGIDNFLA--
CBH 5 light CDR 1	(1)	---RASQSSWLA--
CBH 7 light CDR 1	(1)	--RSQSISSFLN--
CBH 8C light CDR 1	(1)	-RASQGISRYLA--
CBH 8E light CDR 1	(1)	-RASQTINRYLN--
CBH 11 light CDR 1	(1)	-RASQSINLWLA--
CBH 17 light CDR 1	(1)	--REPNIQTNSVH-
Consensus	(1)	GASQSVRSNYLA

CDR 2

	(1)	<u>1</u> 7
light chain seq ID 7 CDR 2	(1)	GVSSRAT
CBH 2 light CDR 2	(1)	-GVSRAT
CBH 4B light CDR 2	(1)	DASIRAT
CBH 4D light CDR 2	(1)	EVSKRPS
CBH 4G light CDR 2	(1)	AASSLQS
CBH 5 light CDR 2	(1)	KASNVQD
CBH 7 light CDR 2	(1)	AASSLQS
CBH 8C light CDR 2	(1)	DTSNRAT
CBH 8E light CDR 2	(1)	AASSLQS
CBH 11 light CDR 2	(1)	KTSTSES
CBH 17 light CDR 2	(1)	-YDDRPS
Consensus	(1)	GVSSRAT

CDR 3

	(1)	<u>1</u> 15
light chain seq ID 7 CDR 3	(1)	QQYGSSPRT-----
CBH 2 light CDR 3	(1)	QQYGTSPFTFG----
CBH 4B light CDR 3	(1)	QQYGGSPFFGG----
CBH 4D light CDR 3	(1)	SSYTNNITPVIFGG-
CBH 4G light CDR 3	(1)	--QKYNAPFTFGP-
CBH 5 light CDR 3	(1)	--QYNNFSGTIFGQ-
CBH 7 light CDR 3	(1)	--QQSYSPLLTFGG-
CBH 8C light CDR 3	(1)	QQRSNWPPALTFGG-
CBH 8E light CDR 3	(1)	QQSFSTSAMYTIFGQ-
CBH 11 light CDR 3	(1)	--QHYSSSSWTIFGQ-
CBH 17 light CDR 3	(1)	QVWNNNTNNHRGSSEL
Consensus	(1)	QQYGSSPRT

**Comparison of deduced amino acid sequences
of CBHs Light chain genes with ID 8**

CDR 1

	(1)	<u>1</u>	<u>14</u>
light chain seq ID 8 CDR 1	(1)	-RASQSVGNNLA--	
CBH 2 light CDR 1	(1)	-RASQRVLGYLE--	
CBH 4B light CDR 1	(1)	-RASQSVSSTYVA-	
CBH 4D light CDR 1	(1)	TGTSSDIGGYNFVS	
CBH 4G light CDR 1	(1)	-RASQGIDNFLA--	
CBH 5 light CDR 1	(1)	-RASQSSWLA----	
CBH 7 light CDR 1	(1)	--RSQSISSFLN--	
CBH 8C light CDR 1	(1)	-RASQSISRYLE--	
CBH 8E light CDR 1	(1)	-RASQTINRYLN--	
CBH 11 light CDR 1	(1)	-RASQSINLWLA--	
CBH 17 light CDR 1	(1)	--REPNI GTNSVH-	
Consensus	(1)	RASQSVGNNLA	

CDR 2

	(1)	<u>1</u>	<u>7</u>
light chain seq ID 8 CDR 2	(1)	GGNTRAT	
CBH 2 light CDR 2	(1)	-GVSRAT	
CBH 4B light CDR 2	(1)	DASIRAT	
CBH 4D light CDR 2	(1)	EVSKRPS	
CBH 4G light CDR 2	(1)	AASSLQS	
CBH 5 light CDR 2	(1)	KASIVQD	
CBH 7 light CDR 2	(1)	AASSLQS	
CBH 8C light CDR 2	(1)	DTSNRAT	
CBH 8E light CDR 2	(1)	AASSLQS	
CBH 11 light CDR 2	(1)	KTSTSES	
CBH 17 light CDR 2	(1)	-YDDRPS	
Consensus	(1)	GGNTRAT	

CDR 3

	(1)	<u>1</u>	<u>15</u>
light chain seq ID 8 CDR 3	(1)	QHYSTWPLT-----	
CBH 2 light CDR 3	(1)	QQYGTSPFTFG----	
CBH 4B light CDR 3	(1)	QQYGGSPFFGG----	
CBH 4D light CDR 3	(1)	SSYTNNITPVIFGG-	
CBH 4G light CDR 3	(1)	QKYNAPFTFGP---	
CBH 5 light CDR 3	(1)	QYNNFSGTFGQ---	
CBH 7 light CDR 3	(1)	--QQSYSPLLTFGG-	
CBH 8C light CDR 3	(1)	QQRSNWPPALTFFG-	
CBH 8E light CDR 3	(1)	QQSFSTSAMYTFGQ-	
CBH 11 light CDR 3	(1)	QHYSSSSWTFGQ---	
CBH 17 light CDR 3	(1)	QVWNNTNNHRGSSEL	
Consensus	(1)	QHYSTWPLT	